

User Manual

About this document

Scope and purpose

This document provides description and information for the Dual LIN Demoboard. This Demoboard can be used for the new Infineon 14-pin Dual LIN transceivers:

- TLE7268SK (with socket), TLE7268LC

Note: The following information is given as a hint for the implementation of our devices only and shall not be regarded as a description or warranty of a certain functionality, condition or quality of the device.

Intended audience

This document is intended for engineers who develop applications.

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Summary

1 Summary

This document is guideline for the Dual LIN transceiver demoboard in DSO-14 / TSON-14 package from Infineon Technologies AG and provides information for the proper usage of the demoboard.

The demoboard can be used for all standard Dual LIN transceiver on the market, which fulfill the OEM required standard pinout for DSO-14 and TSON-14 package (see **Figure 1**).

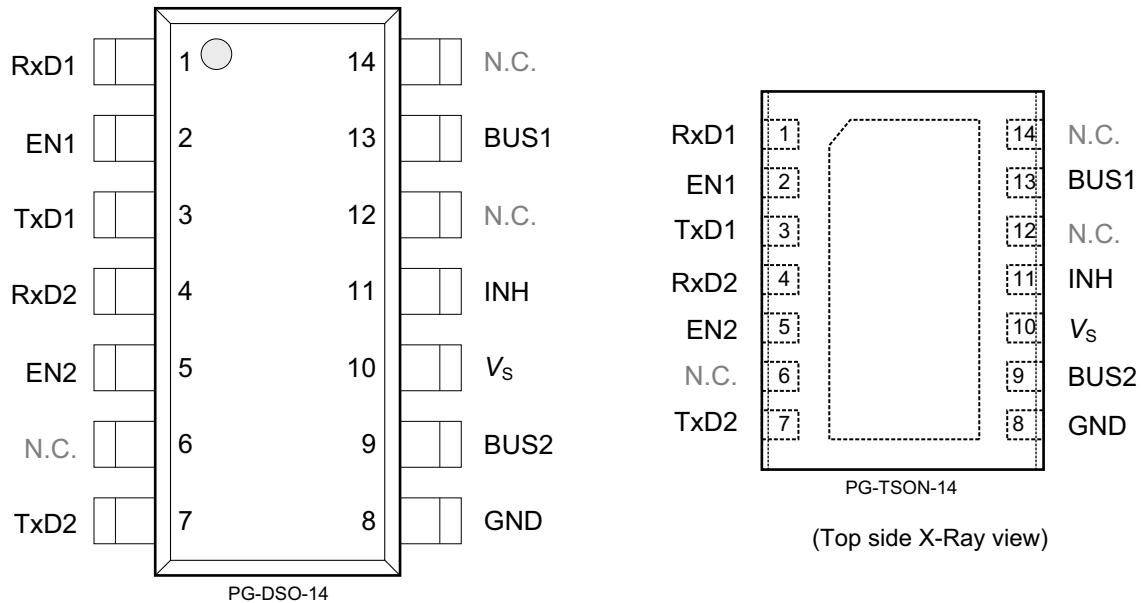


Figure 1 Pin-out of Infineon 14-pin Dual LIN transceiver TLE7268

2 General Function

The demoboard can be used for various test cases and various Dual LIN transceiver. Power supply failures can be simulated as well as different modes of operation. The demoboard should be used to evaluate existing and new Dual LIN transceivers on the market. Advantages, risks and disadvantages of competitor devices versus Infineon devices can be tested and measured.

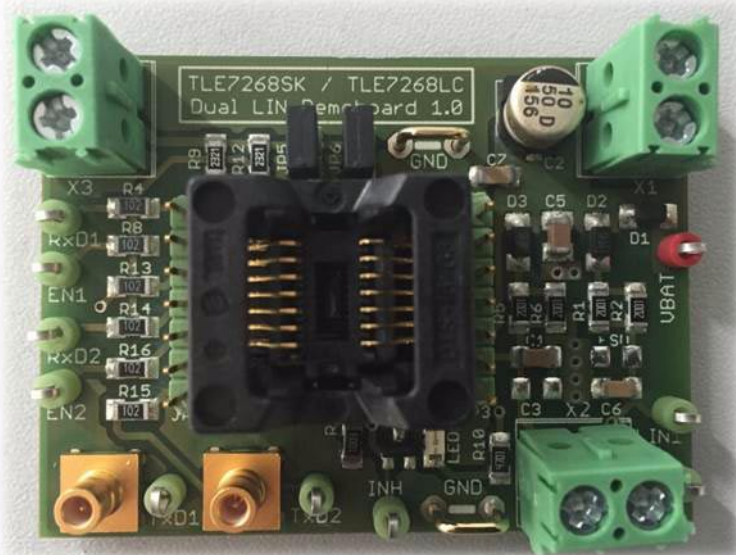


Figure 2 Photo of the DSO-14 / TSON-14 LIN Demoboard

3 Schematic and PCB Layout

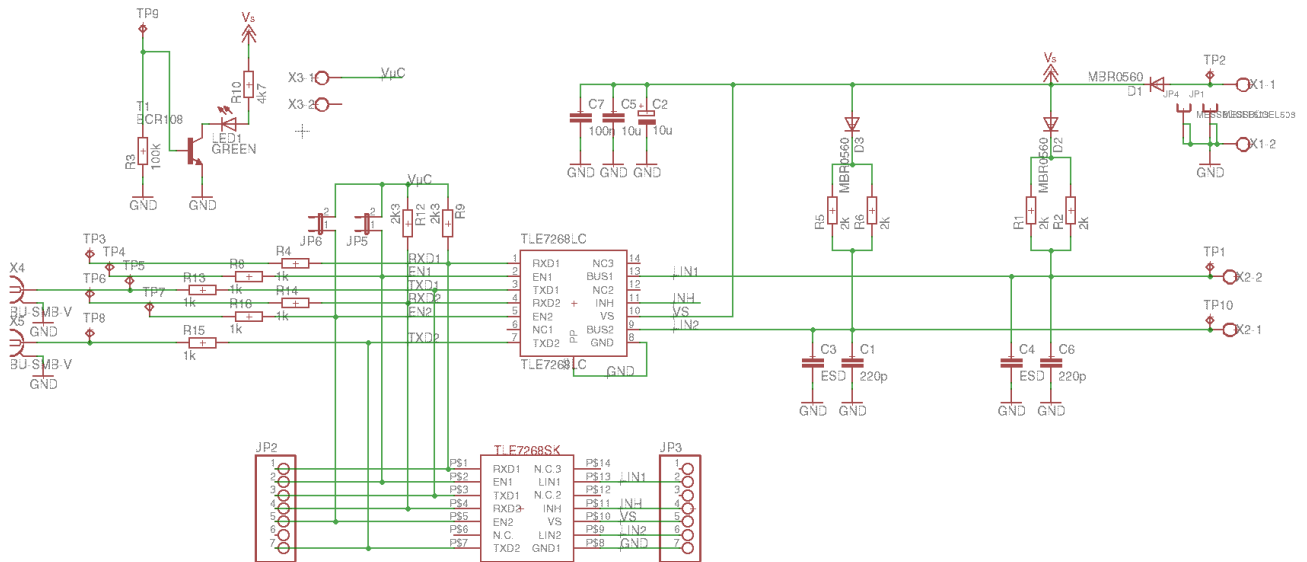


Figure 3 Schematic of TLE7268SK / TLE7268LC Dual LIN demoboard

Schematic and PCB Layout

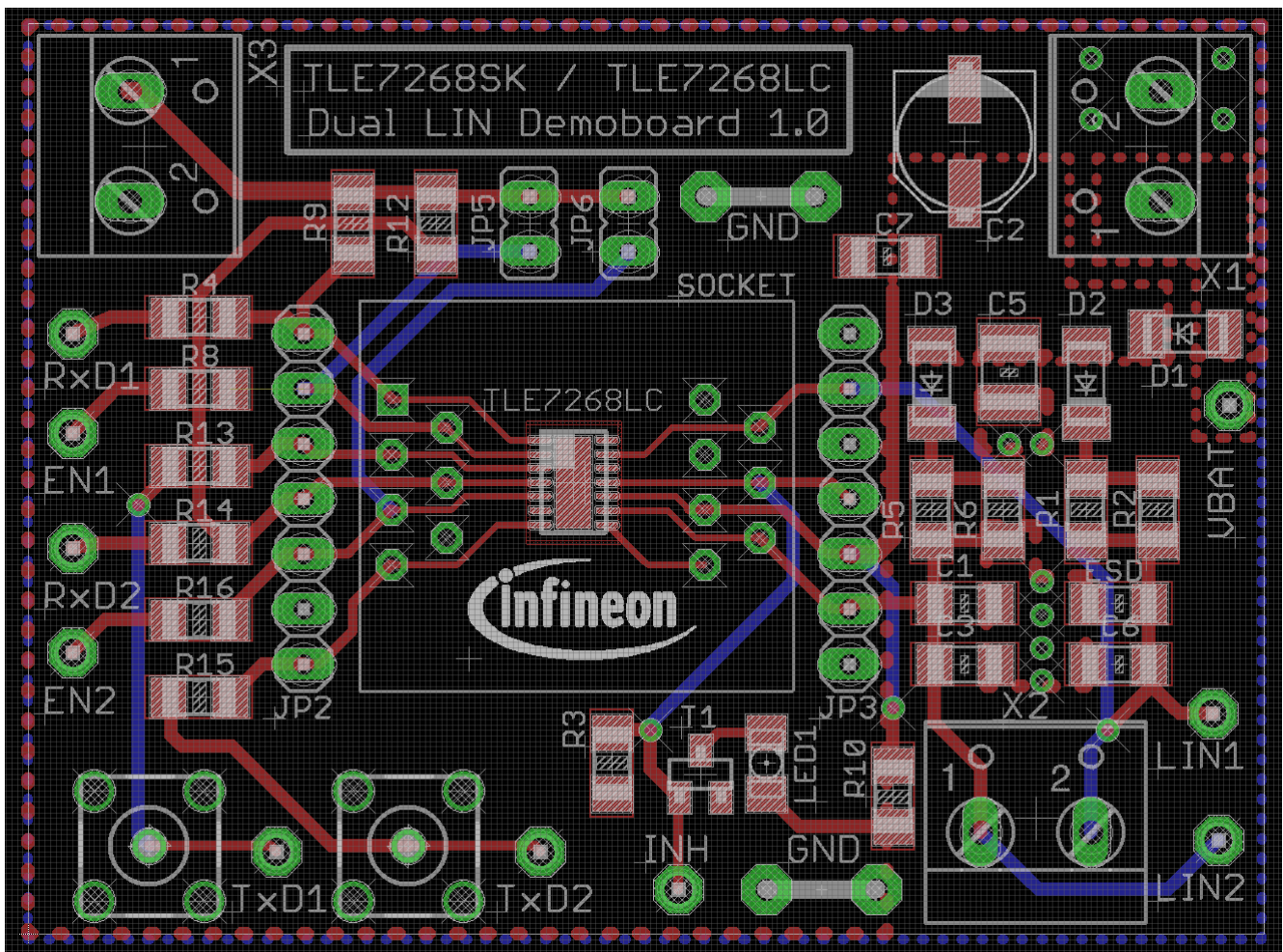


Figure 4 PCB layout of TLE7268 Dual LIN demoboard (Top + Bottom)

Table 1 Bill of Material

Part	Value	Device	Package
C1	220pF	Capacitor	C1206
C2	10 μ F	Capacitor	Panasonic_D
C3	ESD	Capacitor	C1206
C4	ESD	Capacitor	C1206
C5	10 μ F	Capacitor	C1210
C6	220pF	Capacitor	C1206
C7	100nF	Capacitor	C1206
D1	MBR0560	Diode	C1206
D2	MBR0560	Diode	C1206
D2	MBR0560	Diode	C1206
TLE7268LC	-	TLE7268LC	TSON-14
JP1, JP4	-	Testpoint for GND	p1-13 (0.05 inch diameter)
JP2, JP3	-	1x07	pinhead
JP5, JP6	-	Jumper	

Schematic and PCB Layout

Table 1 Bill of Material

Part	Value	Device	Package
SOCKET	TLE7268_SOCKET	SOCKET	OTS-16-1.27-03-00
R1	2k	Resistance	R1206
R2	2k	Resistance	R1206
R3	100k	Resistance	R1206
R4	1k	Resistance	R1206
R5	2k	Resistance	R1206
R6	2k	Resistance	R1206
R8	1k	Resistance	R1206
R9	2k3	Resistance	R1206
R10	4k7	Resistance	R1206
R12	2k3	Resistance	R1206
R13	1k	Resistance	R1206
R14	1k	Resistance	R1206
R15	1k	Resistance	R1206
R16	1k	Resistance	R1206
TP1 -TP10	-	Test Points	P1-13 (0.05 inch diameter)
T1	BCR108	NPN Transistor	SOT23
X4 / X5	-	Coax Connector	BU-SMB-V
X1, X2, X3	-	Connectors	W237-132 (0.2 pitch)

Summary

4 Summary

Revision	Date	Changes
1.0	2018-08-31	Demoboard Guideline created

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